

*Phlox Carolina*, L., var. *ovata*, Benth.=*P. ovata*, L.—Gray, l. c., p. 249.

*Phlox procumbens*, Lehm.=*P. amana*, Sims.—Gray, l. c., p. 251.

*Physalis viscosa*, Gray's Man.=*P. Virginica*, Mill.—Gray, Proc. Am. Acad., 10. p. 65. The true *P. viscosa* of Linn. is a southern plant, which ranges from North Carolina to Florida.

*Chenopodium album*, L., var. *Boscianum*, Gray=*C. Boscianum*, Moq.—Watson, in Proc. Am. Acad., 9. p. 94.

*Rumex Britanica*, L.=*R. altissimus*, Wood.—Gray, in Proc. Am. Acad., 8. p. 399.

*Rumex orbiculatus*, Gray=*R. Britanica*, L.—Gray l. c.

*Chenopodium glaucum*, L.=*Blitum glaucum*, Koch.—Watson, l. c., p. 101.

*Polygonum aciculare*, L., var. *erectum*, Roth.=*P. erectum*, L.—Watson, Am. Nat., 7. p. 664.

The following changes in the genus *Carex* are found in Olney's *Carex Boreali-Americana*:

*Carex crus-corri*, Shuttlew.=*C. Nuttallii*, Schw.

*C. retroflexa*, Muhl.=*C. rosea*, Schk., var., Olney.

*C. canescens*, L. var. *vitilis*, Boott=*C. vitilis*, Fries.

*C. arida*, Schw. & Torr.=*C. Muskingumensis*, Schw.

*C. cristata*, Schw.=*C. lagopodioides*, Schk., var. *cristata*, Carey.

*C. cristata*, Senw., var. *mirabilis*, Boott=*C. lagopodioides*, Schk., var. *mirabilis*, Olney.

*C. adusta*, Boott=*C. albo-lutescens*, Schw.

*C. fena*, Willd., var.(?) *sabulonum*, Boott=*C. silicea*, Olney.—Proc. Am. Acad., 7. p. 393.

*C. straminea*, Schk., var. *tenera*, Boott=*C. tenera*, Dew.

*C. straminea*, Schk., var. *aperta*, Boott=*C. tenera*, Dew., var. *major*, Olney.

*C. straminea*, Schk., var. *hyalina*, Boott=*C. straminea*, Schk., var. *Craucei*, Boott.

*C. Barrattii*, Schw. & Torr.=*C. littoralis*, Schw.

*C. euginata*, Tausch.=*C. panicea*, L., var. *refracta*, Olney.

*C. Meadii*, Dew.=*C. panicea*, L., var. *Meadii*, Olney.

*C. tetanica*, Schk.=*C. panicea*, L., var. *tetanica*, Olney.

*C. Craucei*, Dew.=*C. microdonta*, Torr.

*C. asticalis*, M. A. Curtis=*C. virescens*, Muhl., var. *asticalis*, Olney.

*C. Oederi*, Ehrh.=*C. viridula*, Mx.

*C. polymorpha*, Muhl.=*C. panicea*, L., var. *scariosa*, Olney.

*C. rotundata*, Wahl.=*C. miliaris*, Mx., var.? Olney.—THOS. C. PORTER, *Euston, Pennsylvania*.

CUSCUTA RACEMOSA.—That "new" *Cuscuta racemosa*, the Alfalfa-Dodder, was, after all, not new to Prof. Thurber and to the readers of the "American Agriculturist." By an unpardonable oversight his article in the number of December, 1874, of that journal adorned with a cut, was overlooked not only in the notice published in the "GAZETTE" of January, but also in the Flora of California, published last summer. It seems that the parasite has made its appearance in California at least three years ago on Luzerne fields and its nature and dangerous character was recognized by Prof. Thurber and the means indicated to eradicate it. The little notice of this plant in the January number of the GAZETTE has elicited the information from California that the parasite is "now well naturalized here (about San Francisco Bay), and is a great pest among the Chili clover."—G. E.

FORKING FERNS.—In the Nov. number of the GAZETTE a correspondent gives an instance of the forking of the fertile spike of *Botrychium Virginianum*, Swz. (This is the correct orthography, and it should always be so written. *B. Virginicum* is the later orthography of Willdenow, and not of Swartz.), and refers it to an injury received by

the plant when growing. I have observed the same phenomena, and apparently from the same cause, in other species, but it sometimes occurs when the plant has not received any injury. I have a specimen of *B. Virginianum* with two perfect fertile spikes, the common stalk forking just above the union with the sterile frond. The tendency to fork on the part of our ferns I have found to be quite common. I have noticed and received from correspondents, numerous specimens of the different genera and species. Some curious examples occur in *Campylosorus*, some specimens forking directly from the simply auricled base, making a double frond, and others forking from the long-attenuated tips.

In *Dicksonia* I have observed specimens in which not only the frond but the pinnae also were forked.—GEO. E. DAVENPORT.

ASPIDIUM SPINULOSUM, Swz.—What makes varieties? I do not know that I clearly apprehend the meaning of your correspondent who in the Nov. number inquires if his specimen of this species may not be “another of the many plants where the so-called ‘varieties’ are merely forms with individual instead of local peculiarities,” but I have always supposed that it was individual peculiarities that made varieties. A plant that depended altogether upon local influences for its character would be very apt to run back into the normal form of the species on being removed from those local influences and such a plant I should not consider as a variety at all. If it be local peculiarities that make varieties then how does it happen that all of the plants growing within the ranges of the same local influences are not always of the same character? Within an area containing at least half an acre of *Aspidium spinulosum*, in the vicinity of Boston, I find many forms of *spinulosum* all growing together and subject to the same local influences, and I fail to see how two plants of one species growing side by side, under precisely the same influences, can have two distinct forms if it is local influences alone that make their peculiarities. Rather I should say that these peculiarities came from some cause inherent in the plants themselves and that, therefore, it is individual and not local peculiarities that make varieties.—GEO. E. DAVENPORT.

PYRUS AMERICANA, DC.—This beautiful tree makes its home in central Pennsylvania near the summit of the mountains, marking with uniformity a line of about 1,300 to 1,400 feet above tide. As you climb the steep ascent of Tussey and Bald Eagle mountains, among masses of broken rocks covered with lichens, a trio of beautiful small trees attracts your attention—*Pyrus Americana*, DC., *Betula papyracea*, Ait., with its white bark and graceful spray, and *Acer Pennsylvanicum*. These all seem to love a lofty exposure, and thrive on the scanty debris of shattered rocks. *Acer Pennsylvanicum* is often met with at lower elevations. Ascend either of these mountains in their trend to the north east through Huntingdon and Centre counties, your approach to their summit is heralded by clumps of the Birch and *Pyrus Americana*. There is, however, a marked exception to this habitat of high exposure. The *Pyrus Americana* makes a sudden descent of about 700 feet to the base of Tussey Mountain. Two miles east of Spruce Creek Station on the Pennsylvania Rail Road a small colony of a dozen bushes, dwarfed to six feet in height, is found growing over an area of a half-acre of rocks. The reason for this departure from the usual elevation of the tree is found in the fact that below these rocks perpetual ice creates a cold atmosphere. This interesting locality, sheltered from the direct action of the sun by the precipitous mountain side and the erosion in it made by water action in an earlier era, has the cool, damp atmosphere of ice in the warm days of August. The ice is concealed by rocks covered with a vigorous growth of mosses, shrubs and trees, and is found [in August] some three feet below the surface.

In the same locality grows *Pinus Strobus*, L., *Abies Canadensis*, Michx., *Mitchella repens*, L., *Rubus strigosus*, Michx., *Fragaria vesca*, L., *Ribes prostratum*, L'Her., *Heuchera pubescens*, Pursh.—J. R. L.